

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) ATOMP001			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]  on _____  Signature _____  Typed or printed name _____	Application Number 10613513	Filed July 3, 2003			
	First Named Inventor Brian Y. Lim				
	Art Unit 1725	Examiner Maria Alexandra Elve			
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%; vertical-align: top; padding: 5px;"><input type="checkbox"/> applicant/inventor.  <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)  <input checked="" type="checkbox"/> attorney or agent of record.     39,626 Registration number _____  <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</td><td style="width: 50%; vertical-align: top; padding: 5px; text-align: center;"><div style="border-bottom: 1px solid black; margin-bottom: 5px;">/Melvin D. Chan/</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">Signature Melvin D. Chan</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">Typed or printed name</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">408-701-0035</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">Telephone number</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">February 6, 2008</div><div style="border-bottom: 1px solid black; margin-bottom: 5px;">Date</div></td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>				<input type="checkbox"/> applicant/inventor.  <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)  <input checked="" type="checkbox"/> attorney or agent of record.     39,626 Registration number _____  <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____	<div style="border-bottom: 1px solid black; margin-bottom: 5px;">/Melvin D. Chan/</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Signature Melvin D. Chan</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Typed or printed name</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">408-701-0035</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Telephone number</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">February 6, 2008</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Date</div>
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<input type="checkbox"/> *Total of _____ forms are submitted.					

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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## **United States Patent and Trademark Office**

Application No.: 10/613,513  
Confirmation No.: 4790  
Customer No.: 51111  
Docket No.: ATOMP001

Commissioner for Patents  
POB 1450  
Alexandria, VA 22313-1450

### **Reasons for Pre–Appeal Brief Review Request**

Dear Commissioner:

Applicants request a pre–appeal brief conference review because the rejections of record are clearly based on legal and factual error.

#### **Section 112 Rejection**

Applicants believe the section 112, second paragraph rejection to claims 8–9 is not proper. Claims 8–9 particularly point out and distinctly claims the subject matter of the invention, especially for one of skill in the art. See applicants’ May 16, 2007 response for detail.

Regarding claim 8, the examiner states in her August 9, 2007 office action, “it is not clear how a set of islands of catalyst can be associated with one die. Is the die very large, are the catalyst areas scattered about?” Regarding claim 9, the examiner states, “Is the catalyst on, in or near the die(s)?”

However, one of skill in the semiconductor processing arts would understand that semiconductor fabrication involves patterning regions (e.g., islands). An entire die, or multiple dies, of a wafer can be patterned, if so desired; or, within a single die, multiple regions can be patterned, if so desired. Patterned regions within a die (or in multiple dies) can contain a catalyst to cause nanotubes to grow in these regions. Applicants believe the claims are sufficiently definite to one of skill in the art. The rejection should be withdrawn.

#### **Section 103 Rejection**

The examiner’s section 103 rejection is improper for reasons indicated on pages 8–12 of the May 16, 2007 response.

In brief, there is *no suggestion to combine* the cited references in the way the examiner asserts. Colbert and Haruta teach away from each other. The Colbert approach discourages heating more than just a fiber tip and is completely the opposite of Haruta's approach of laser ablating a target (which is in comparison, a relatively large area) to form a gaseous precursor material. Nakayama is very different from Colbert and Haruta in that the laser is directed at a semiconductor solid material in order to melt the semiconductor solid, rather to effect carbon fiber growth. Therefore, there is no suggestion to combine these references, especially in the way the examiner suggests.

Further, even if the cited references are combined, the *combination falls short* of the present invention as recited:

For example, regarding claim 1, the cited reference do not show or suggest heating using *multiple prongs* of radiating energy to locally heat a catalyst.

Regarding claim 16, the prior art never shows or suggests *cooling* a workpiece. Cooling a workpiece down to -250 degrees is very different from heating a workpiece.

Regarding claim 29, the prior art never shows or suggests providing a *first temperature* for the stage and a *second temperature* for selected work regions. Further the prior art does not show or suggest a *feedstock delivery system*.

Regarding claim 38, the prior art never shows or suggests providing a *third temperature* for the feedstock gas.

Applicants believe all pending claims are allowable.

Respectfully submitted,

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